

**UNCLASSIFIED**

**AD \_ 402 048 \_**

**DEFENSE DOCUMENTATION CENTER**

**FOR**

**SCIENTIFIC AND TECHNICAL INFORMATION**

**CAMERON STATION, ALEXANDRIA, VIRGINIA**



**UNCLASSIFIED**

NOTICE: When government or other drawings, specifications or other data are used for any purpose other than in connection with a definitely related government procurement operation, the U. S. Government thereby incurs no responsibility, nor any obligation whatsoever; and the fact that the Government may have formulated, furnished, or in any way supplied the said drawings, specifications, or other data is not to be regarded by implication or otherwise as in any manner licensing the holder or any other person or corporation, or conveying any rights or permission to manufacture, use or sell any patented invention that may in any way be related thereto.

① 402048

u

44294

S/119/62/000/012/007/009  
D201/D308

ASIA FILE COPY

STEP  
26.490

⑤ 17511

AUTHOR:

⑤ Mayzel', M.B.

TITLE:

⑥ A six-diaphragm pressure transducer

PERIODICAL:

①⑤ Priborostroyeniye, no. 12, 1962, 24

TEXT:

The transducer has six diaphragms, distorted by the pressure difference. Bridge-type strain gauges are bonded to each diaphragm, with their outputs connected in such a manner that the unbalance signals add together and operate directly either a digital recorder or an oscillograph. The expression for the sensitivity of the transducer is given. The pressure transducers of this type are calibrated within the linear part of their characteristic. Practice shows that their sensitivity, if diaphragms of equal dimensions are used, is equal to the sensitivity of an instrument with one diaphragm multiplied by the number of diaphragms. The increase in the sensitivity is accompanied by the decrease of the overall error by  $\sqrt{n}$  times. (n-number of summable bridges). Practice also shows that the instrument is reliable in operation and that the r.m.s.

Card 1/2

X

A six-diaphragm ...

S/119/62/000/012/007/009  
D201/D308

error, when working with a digital recorder, is 0.2%. There are 2 figures.

X

Card 2/2